09/905563

AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph that begins on page 4, line 15 with the following amended paragraph:

er os As mentioned above, when performing read and write functions, the transducer 24 is positioned above the track associated with the data to be read or written. When a disk drive 10 receives a request to access a certain track, it must move the actuator arm assembly 18 and transducer 24 to the associated track. A servo control system is generally used to control the VCM 32 and locate the transducer 24 above the appropriate track. Servo control systems generally perform two distinct functions: seek control and track following. The seek control function comprises controllably moving the transducer 24 from an initial track position to a target track position. In this regard, the servo control system receives a command from a host computer that data is to be written to or read from a target track of the disk, and the servo system proceeds to move the transducer 24 to the target track from the track where it is currently located. Once the transducer 24 is moved sufficiently near the target track, the track following function is performed to center and maintain the transducer 24 on the target track until the desired data transfer is completed.

Please replace the paragraph that begins on page 21, line 16 with the following amended paragraph:

As depicted in Fig. 9, initially, the control electronics receive a seek request, as indicated at block 500. The control electronics then, at block 504, determine the seek velocity profile for the seek request. Next, according to block 508, the control electronics

09/905563

determine whether the seek is toward the ramp[[,]] or away from the ramp. If the seek is away from the ramp, the control electronics do not derate the seek velocity profile, as indicated at block 512. If the control electronics determine that the seek is toward the ramp, the control electronics then determine whether the deceleration current will exceed the maximum safe deceleration current for any data track that the transducer travels over during the seek, as indicated at block 516. As described above, the maximum safe deceleration current for a particular track is the current requierd required to decelerate a transducer traveling at a velocity represented by the reference line 100 of Fig. 3. If the deceleration current is not greater than the maximum safe velocity, the seek velocity profile is not derated, according to block 512.